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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/662,580	09/15/2000	Douglas N. Knisely	7-4-28	2012

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EXAMINER

KLIMACH, PAULA W

ART UNIT PAPER NUMBER

2135

DATE MAILED: 07/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/662,580

Applicant(s)

KNISELY ET AL.

Examiner

Paula W. Klimach

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 May 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 29 and 30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 29-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 05/09/05 has been entered.

Response to Arguments

Applicant's arguments filed 05/09/05 have been fully considered but they are not persuasive because of following reasons.

Applicant argued Burrows is for key distribution, whereas the present invention is for authentication. This is not found persuasive. The title of the article by Burrow is "a Logic of Authentication," therefore burrows is for authentication.

Regarding the applicants argument that Applicants claim1 is that M receives that authentication key from B via network A. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., M receives that authentication key from B via network A) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Claim 1 cites "A belonging to a network A, transacting with network A to obtain an encryption key K known only to network A and to the mobile station."

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The combination of Burrows and Marvit disclose in Burrow the communication between the A (mobile station) and S (wherein A and S make up the network "A" of the application). The transmissions from A to M (A to S in the reference of Burrow) is encrypted by the key K (Kas) which ensures the transmissions are secure.

Applicant argues that Burrows does not suggest using a second wireless network. The two networks disclosed in Burrow are the one network made up of A and S, the second network is made up of B. In regards to the applicants argument that, "established, or readily established, security measures such as encryption key K." In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., established, or readily established, security measures (emphasis added) such as encryption key K) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Claim 1 cites "...network A to obtain an encryption key K known only to network A and to the mobile station B." The encryption key K (Kas) that is obtained from the network A (the network made up of A and S) is used to encrypt communications between M (A) and the network A (node A and node S) to assure that over-the-air communications to and from the mobile station will be secure.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., SSD originates with B, authentication signature originates with M, and has that information forwarded by the third party) are not recited in the rejected claim(s). Although the claims are interpreted in

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light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., two communications forwarded in opposite directions by network A prior to establishment of the session) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, using a key that is known only to S and A will discourage eavesdropping and forwarding the message through S allows A and B to check their timestamp against one system, S.

The applicant argues further that Marvit deals only with key distribution, not authentication. This is not found persuasive because the abstract of Marvit discloses a method for controlling and tracking access to disseminated information involves encrypting data using a key that is maintained in a key repository. Authentication is proving that the entity is who they

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say they are. The system of Marvit controls access by determining that the entity is who they say they are by determining if the entity has the key to decrypt the message.

The examiner is not trying to teach the invention but is merely trying to interpret the claim language in its broadest and reasonable meaning. The examiner will not interpret to read narrowly the claim language to read exactly from the specification, but will interpret the claim language in the broadest reasonable interpretation in view of the specification. Therefore, the examiner asserts that Marvit and Burrow do teach or suggest the subject matter broadly recited in independent Claims 29 and 30.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marvit (6,625,734) in view of Burrows et al.

In reference to claim 29, Marvit discloses a system for authentication (authentication) comprising a system wherein via wireless communications (column 4 lines 18-19) with a base station A (102) belonging to a network A (Fig. 1), transacting with network A to obtain an encryption key K known only to network A and to the mobile station (column 4 lines 38-47).

Although Marvit discloses encryption using the key received from the repository, Marvit does not expressly disclose communications with base station A which are secured by key K,

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obtaining an authentication key SSD known only to network A, to the mobile station, and to a further network B; sending an authentication message to network A to be forwarded to network B, the authentication message comprising an identification number encrypted with SSD; and if the authentication message is accepted by network B, entering into wireless communications with a base station of network B.

Burrows discloses systems for authentication wherein communications with mobile station (A) that communicates with network A (made up of the nodes A and S) which are secured by key K (Kas; page 18 message 2 paragraph 2), obtaining an authentication key SSD (Kab) known only to network A, to the mobile station, and to a further network B (page 18 messages 2 and 3 paragraph 2); sending an authentication message to network A to be forwarded to network B, the authentication message comprising an identification number encrypted with SSD; and if the authentication message is accepted by network B, entering into wireless communications with a base station of network B (page 18 messages 4 and 5 in combination with page 25 section 7).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to encrypt the message using a key known to A and S; and to forward the messages through S as in Burrow in the system of Marvit. One of ordinary skill in the art would have been motivated to do this because using a key that is known only to S and A will discourage eavesdropping and forwarding the message through S allows A and B to check their timestamp against one system, S.

In reference to claim 30, Marvit discloses a system for authentication (authentication) comprising a system wherein via wireless communications (column 4 lines 18-19) with a base

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station A (102) belonging to a network A (Fig. 1), transacting with network A to obtain an encryption key K known only to network A and to the mobile station (column 4 lines 38-47).

Although Marvit discloses encryption using the key received from the repository, Marvit does not expressly disclose receiving an authentication key SSD from a further network B and providing SSD to the mobile station using communications which are secured by key K; receiving from the mobile station an authentication message which comprises an identification number encrypted with SSD; and forwarding the authentication message to network B.

Burrow discloses receiving an authentication key SSD from a further network B (page 25 message 1, section 7) and providing SSD (K_{ab}) to the mobile station (page 25 message 2, section 7) using communications which are secured by key K_{as} (page 25 message 2 paragraph 2); receiving from the mobile station, via wireless communications, an authentication message which comprises an identification number encrypted with SSD; and forwarding the authentication message to network B (page 18 messages 2 in combination with paragraph 2).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to encrypt the message using a key known to A and S; and to forward the messages through S as in Burrow in the system of Marvit. One of ordinary skill in the art would have been motivated to do this because using a key that is known only to S and A will discourage eavesdropping and forwarding the message through S allows A and B to check their timestamp against one system, S.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paula W. Klimach whose telephone number is (571) 272-3854.

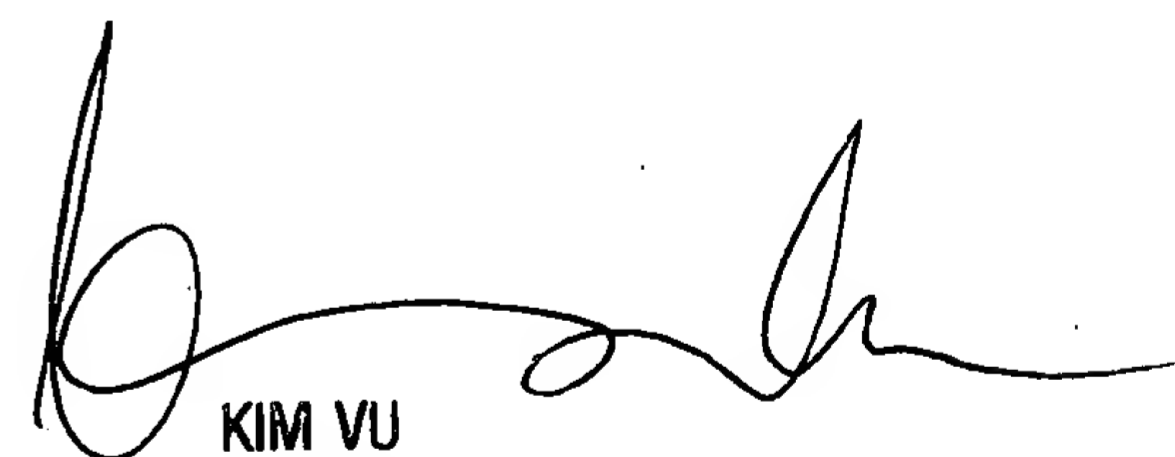
The examiner can normally be reached on Mon to Thr 9:30 a.m to 5:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on (571) 272-3859. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PWK

Thursday, July 21, 2005



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SUPERVISORY PATENT EXAMINER
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